Material Safety Data Sheet



XD Hand Cleaner

1. Product and company identification

Product name : XD Hand Cleaner
Supplier : Betco Corporation

1001 Brown Avenue Toledo, OH 43607 www.betco.com 888-462-3826

Material uses : Consumer products: Hand cleanser

Manufacturer : Betco Corporation

1001 Brown Avenue Toledo, Ohio 43607 www.betco.com 888-462-3826

 Code
 : 793

 MSDS #
 : 793

 Validation date
 : 1/5/2016.

 Print date
 : 1/6/2016.

In case of emergency : Chemtrec (800) 424-9300

Product type : Liquid.

2. Hazards identification

Emergency overview

Physical state : Liquid. [Viscous liquid.]

Color : Light brown.
Odor : Pleasant.
Signal word : CAUTION!

Hazard statements : CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED.

Precautionary measures : Do not handle until all safety precautions have been read and understood. Obtain

special instructions before use. Do not breathe vapor or mist. Do not ingest. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing.

Use personal protective equipment as required. Wash thoroughly after handling.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Routes of entry : Dermal contact. Eye contact.

Potential acute health effects

Inhalation: No known significant effects or critical hazards.

Ingestion: Harmful if swallowed.Skin: May cause skin irritation.

Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

Potential chronic health effects

Chronic effects: Contains material that may cause target organ damage, based on animal data.

Carcinogenicity
 No known significant effects or critical hazards.
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.

2. Hazards identification

Target organs

: Contains material which may cause damage to the following organs: digestive system, upper respiratory tract, skin, central nervous system (CNS).

Medical conditions aggravated by overexposure

: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
Distillates (petroleum), hydrotreated light	64742-47-8	10 - 20
Poly(oxy-1,2-ethanediyl), α -sulfo- ω -(dodecyloxy)-, sodium salt (1:1)	9004-82-4	1 - 5
titanium dioxide	13463-67-7	0.1 - 1
ethanol	64-17-5	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact	Check for and remove any contact lenses.	Immediately flush eyes with plenty of water
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for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately. In case of contact with eyes, rinse immediately with plenty of

water.

Skin contact Wash skin surfaces thoroughly after contact. Wash clothing before reuse. Clean shoes

thoroughly before reuse. Get medical attention if irritation develops.

Inhalation Move exposed person to fresh air. If not breathing, if breathing is irregular or if

> respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention

immediately.

Ingestion Wash out mouth with water. Do not induce vomiting unless directed to do so by medical

personnel. Never give anything by mouth to an unconscious person. Get medical

attention immediately.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

No specific treatment. Treat symptomatically. Contact poison treatment specialist Notes to physician

immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable

: Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

5. Fire-fighting measures

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide

sulfur oxides metal oxide/oxides

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Ingredient	Exposure limits
titanium dioxide	ACGIH TLV (United States, 2/2010).
	TWA: 10 mg/m³ 8 hour(s).
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 10 mg/m³ 8 hour(s). Form: Total dust
	OSHA PEL (United States, 6/2010).
	TWA: 15 mg/m³ 8 hour(s). Form: Total dust
ETHYL ALCOHOL	ACGIH TLV (United States, 2/2010).
	STEL: 1000 ppm 15 minute(s).
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 1000 ppm 8 hour(s).
	TWA: 1900 mg/m³ 8 hour(s).
	NIOSH REL (United States, 6/2009).
	TWA: 1000 ppm 10 hour(s).
	TWA: 1900 mg/m³ 10 hour(s).
	OSHA PEL (United States, 6/2010).
	TWA: 1000 ppm 8 hour(s).
	TWA: 1900 mg/m³ 8 hour(s).

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection Respiratory

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Eyes

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state : Liquid. [Viscous liquid.]

Flash point : Closed cup: >150°C (>302°F)

Color : Light brown.
Odor : Pleasant.
pH : 6.5 to 8
Relative density : 0.9251

Dispersibility properties : Easily dispersible in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical stability : The product is stable.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
Poly(oxy-1,2-ethanediyl), α-	LD50 Oral	Rat	1600 mg/kg	-
sulfo-ω-(dodecyloxy)-, sodium				
salt (1:1)				

Conclusion/Summary

Chronic toxicity

: Not available.

Conclusion/Summary: Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.06666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Poly(oxy-1,2-ethanediyl), α -sulfo- ω -(dodecyloxy)-, sodiun salt (1:1)	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
33	Eyes - Severe irritant	Rabbit	-	24 hours 100 microliters	-

11. Toxicological information

Skin - Moderate irritant	Rabbit	-	24 hours 25	-
			milligrams	
Skin - Severe irritant	Rabbit	-	24 hours 500	-
			milligrams	

Conclusion/Summary

: Not available.

Sensitizer

Conclusion/Summary

: Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Distillates (petroleum), hydrotreated light	A3	-	-	-	-	-
titanium dioxide ethanol	A4 A3	2B 1	-	+	-	-

Mutagenicity

Conclusion/Summary

: Not available.

Teratogenicity

Conclusion/Summary

: Not available.

Reproductive toxicity

Conclusion/Summary : Not

: Not available.

12. Ecological information

Ecotoxicity

: No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks
Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (1:1)	Acute EC50 3.12 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours

Conclusion/Summary

: Not available.

Persistence/degradability

Conclusion/Summary: Not available.

13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
Mexico Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	_		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG*: Packing group

15. Regulatory information

HCS Classification

: Irritating material

U.S. Federal regulations

: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

SARA 302/304: Formaldehyde, solution

SARA 311/312 Hazards identification: Immediate (acute) health hazard, Delayed

(chronic) health hazard

Clean Water Act (CWA) 311: sodium hydroxide; Formaldehyde, solution

Clean Air Act Section 112 : Not listed

(b) Hazardous Air

Pollutants (HAPs)

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

Class II Substances

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15. Regulatory information

DEA List I Chemicals (Precursor Chemicals)

: Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

State regulations

Massachusetts : None of the components are listed. **New York** : None of the components are listed.

New Jersey : The following components are listed: TITANIUM DIOXIDE: TITANIUM OXIDE (TiO2);

ETHYL ALCOHOL; ALCOHOL

Pennsylvania The following components are listed: TITANIUM OXIDE (TIO2); DENATURED

ALCOHOL

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	•	No significant risk level	Maximum acceptable dosage level
titanium dioxide	Yes.	No.	No.	No.
Formaldehyde, solution	Yes.	No.	Yes.	No.

Canada inventory : Not determined.

International regulations

International lists : Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined.

> Japan inventory: Not determined. Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.

Chemical Weapons

Convention List Schedule

I Chemicals

Chemical Weapons

Convention List Schedule

II Chemicals

Chemical Weapons : Not listed

16. Other information

Convention List Schedule

: Not listed

: Not listed

III Chemicals

Label requirements : CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED.

Hazardous Material Information System (U.S.A.)

2 Health 1 **Flammability** 0 Physical hazards

16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Prepared by : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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